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Reply under 37 CFR 1.116
Expedited Procedure
Technology Center 1624
Attorney Docket No. CV06039US01

## AMENDMENTS TO THE CLAIMS

(Currently Amended) A compound represented by the structural formula (I):

$$\bigcap_{Q^5} X_m \cdot \bigcap_{\substack{P \\ P \\ Q^5}}^{Q^1} Q^2_m \cdot \bigcap_{\substack{P \\ P \\ Q^5}}^{Q^2} Q^3_m \cdot \bigcap_{\substack{P \\ P \\ Q^5}}^{Q^3} Q^4_m$$

or pharmaceutically acceptable isomers, salts, solvates or esters of the compound of Formula (I), wherein in Formula (I) above:

X, Y and Z can be the same or different and each is independently selected from the group consisting of -CH<sub>2</sub>-, -CH(alkyl)- and -C(alkyl)<sub>2</sub>-;

Q<sup>1</sup> and Q<sup>2</sup> can be the same or different and each is independently selected from the group consisting of H, -G, -(C<sub>1</sub>-C<sub>30</sub> alkylene)-G, -OR<sup>6</sup>, -OC(O)R<sup>6</sup>, -OC(O)OR<sup>9</sup>, -OC(O)OR<sup>6</sup>, and -L-M;

Q<sup>3</sup> is 1 to 5 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, -G, -(C<sub>1</sub>-C<sub>30</sub> alkylene)-G, -OR<sup>6</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OR<sup>6</sup>, -C(O)R<sup>6</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -(C(O)R<sup>6</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -OC(O)R<sup>6</sup>,

-(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)R<sup>6</sup>, -OC(O)OR<sup>9</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)OR<sup>9</sup>, -CH=CH-C(O)R<sup>6</sup>,

 $-CH=CH-C(O)OR^6, -C == C-C(O)OR^6, -C == C-C(O)R^6, -O.(C_1-C_{10} \text{ alkylene})-OR^6,$ 

-O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)OR<sup>6</sup>, -CN,

-O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR<sup>6</sup>R<sup>7</sup>, -O-C(O)NR<sup>6</sup>NR<sup>7</sup>C(O)OR<sup>6</sup>,

-O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR NR C(O)OR -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)(aryl)-N<sub>3</sub>,

-OC(O)-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)OR<sup>6</sup>, -C(O)NR<sup>6</sup>R<sup>7</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR<sup>6</sup>R<sup>7</sup>,

 $-OC(O)NR^6R^7$ ,  $-(C_1-C_{10} \text{ alkylene})-OC(O)NR^6R^7$ ,  $-NO_2$ ,  $-NR^6R^7$ ,  $-(C_1-C_{10} \text{ alkylene})-NR^6R^7$ ,

-O-(C2-C10 alkylene)-NR<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>C(O)R<sup>7</sup>, -NR<sup>6</sup>C(O)OR<sup>9</sup>.  $-NR^6C(O)NR^7R^8$ ,  $-NR^6S(O)_{0.2}R^9$ ,  $-N(S(O)_{0.2}R^9)_{2.}$ ,  $-CHNOR^6$ ,  $-C(O)NR^6R^7$ , "C(O)NR 6NR 6R7, -S(O), 2NR 6R7, -S(O), 2R9, -O-C(O)-(C1-C10 alkylene)-C(O)NR 6R7, -OC(O)-(C1-C10 alkylene)-NR6C(O)O-(alkylaryl), -P(O)(OR10)2, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OSi(alkyl)<sub>10</sub> . -CF<sub>3</sub>, -OCF<sub>3</sub>, halo, alkoxyalkoxy, alkoxyalkoxyalkoxy, alkoxycarbonylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkyldioyl, allyloxy, aryl, arylalkyl, aryloxy, arylalkoxy, aroyl, aroyloxy, aroylaroyloxy, arylalkoxycarbonyl, benzoylbenzoyloxy, heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylcarbonylalkoxy and -L-M; Q4 is 1 to 5 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, -G, -( $C_1$ - $C_{30}$  alkylene)-G, -OR $^6$ , -( $C_1$ - $C_{10}$  alkylene)-OR $^6$ , -C(O)R $^6$ -(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -C(O)OR<sup>6</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)OR<sup>6</sup>, -OC(O)R<sup>6</sup>,  $-(C_1-C_{10} \text{ alkylene})-OC(O)R^6, -OC(O)OR^9, -(C_1-C_{10} \text{ alkylene})-OC(O)OR^9, -CH=CH-C(O)R^6,$ -CH=CH-C(O)OR<sup>6</sup>, -C==C-C(O)OR<sup>6</sup>, -C==C-C(O)R<sup>6</sup>, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-OR<sup>6</sup>. -O-(C1-C10 alkylene)-C(O)R<sup>6</sup>, -O-(C1-C10 alkylene)-C(O)OR<sup>6</sup>, -CN, -O-(C1-C10 alkylene)-C(O)NR6R7 -O-C(O)NR6NR7C(O)OR6, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR<sup>6</sup>NR<sup>7</sup>C(O)OR<sup>6</sup>, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)(aryl)-N<sub>3</sub>, -OC(O)-(C1-C10 alkylene)-C(O)OR6, -C(O)NR6R7, -(C1-C10 alkylene)-C(O)NR6R7.  $-OC(O)NR^6R^7$ ,  $-(C_1-C_{10})$  alkylene) $-OC(O)NR^6R^7$ ,  $-NO_2$ ,  $-NR^6R^7$ ,  $-(C_1-C_{10})$  alkylene) $-NR^6R^7$ . -O-(C2-C10 alkylene)-NR 6R7 -NR 6C(O)R7 -NR 6C(O)OR9 -NR 6C(O)NR7R8, -NR6S(O)<sub>0.2</sub>R<sup>9</sup>, -N(S(O)<sub>0.2</sub>R<sup>9</sup>)<sub>2</sub>, -CHNOR6, -C(O)NR6R<sup>7</sup>, -C(O)NR6NR6R<sup>7</sup>, -S(O)<sub>0.2</sub>NR6R<sup>7</sup>, -\$(O), R, O-C(O)-(C1-C10 alkylene)-C(O)NR6R, -OC(O)-(C1-C10 alkylene)-NR6C(O)O-(alkylaryl), -P(O)(OR10)2,

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-(C1-C10 alkylene)-OSi(alkyl)3 . -CF3, -OCF3, halo, alkoxyalkoxy, alkoxyalkoxyalkoxy, alkoxycarbonylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkyldioyl, allyloxy, aryl, arylalkyl,

heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylcarbonylalkoxy and -L-M;

Q<sup>5</sup> is 1 to 5 substituents independently selected from the group consisting of alkyl, alkynyl, -O, -(C<sub>1</sub>-C<sub>30</sub> alkylene)-G, -OR<sup>6</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OR<sup>6</sup>, -C(O)R<sup>6</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -C(O)R<sup>6</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -OC(O)R<sup>6</sup>, -C(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -OC(O)R<sup>6</sup>, -C(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)R<sup>6</sup>, -CH=CH-C(O)R<sup>6</sup>, -CH=CH-C(O)R<sup>6</sup>, -C=C-C(O)R<sup>6</sup>, -C-C(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-R<sup>6</sup>, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-R<sup>6</sup>, -N-R<sup>6</sup>, -

 $-NR^*C(O)NR^*R^*$ ,  $-NR^*S(O)_{0,2}R^*$ ,  $-N(S(O)_{0,2}R^*)_2$ ,  $-C(HNOR^*$ ,  $-C(O)NR^*R^*$ ,  $-S(O)_{0,2}R^*$ ,  $-O-C(O)-(C_1-C_{1,0}$  alkylene)- $C(O)NR^*R^*$ ,  $-OC(O)-(C_1-C_{1,0}$  alkylene)- $NR^*C(O)O-(alkylary!)$ ,  $-P(O)(OR^{10})_2$ .

-(C<sub>1</sub>-C<sub>10</sub> alkylene)-OSi(alkyl)<sub>3</sub> , -CF<sub>3</sub>, -OCF<sub>3</sub>, halo, alkoxyalkoxy, alkoxyalkoxy, alkoxyarbonylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkyldioyl, alkyloxy, aryl, arylalkyl, aryloxy, arylalkoxy, aroyl, aroyloxy, arylalkoxy, arylalkoxy, aroyloxy, heteroarylalkoxy, arylalkoxy, dioxolanyl, heterocyclylalkyl, heterocyclylarbonyl, heterocyclylarbonyl, heterocyclylarbonylakoxy and -L-M;

wherein optionally one or more carbon atoms of the  $-(C_1-C_{10} \text{ alkylene})$ - radical of  $Q^1$ ,  $Q^2$ ,  $Q^4$  and  $Q^4$  is independently replaced by  $-O_2$ ,  $-C(O)_2$ ,  $-CH=CH_2$ ,  $-C=C_2$ ,  $-N(alkyl)_2$ ,  $-N(alkylaryl)_2$  or  $-NH_2$ ;

G is selected from the group consisting of a sugar residue, disugar residue, trisugar residue, tetrasugar residue, sugar acid, amino sugar, amino acid residue, oligopeptide residue

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comprising 2 to 9 amino acids, trialkylammoniumalkyl saltradieal and -S(O):-OH, wherein optionally the sugar residue, disugar residue, trisugar residue, tetrasugar residue, sugar acid, amino sugar, amino acid residue or oligopeptide residue of G is substituted with -L-M;

L is selected from the group consisting of

wherein Me is methyl;

M is selected from the group of moieties consisting of

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pharmaceutically acceptable salts of the moieties (M1) and (M3) to (M10) and free acids of the moieties (M1) and (M3) to (M10);

 $R^2$  and  $R^3$  can be the same or different and each is independently selected from the group consisting of hydrogen, alkyl and aryl;

 $R^6$ ,  $R^7$  and  $R^8$  can be the same or different and each is independently selected from the group consisting of hydrogen, alkyl, aryl and arylalkyl; and

each R9 is independently alkyl, aryl or arylalkyl.

each R 10 is independently H or alkyl;

a is 0 or 1:

r is 0 or 1:

m, n and p are independently selected from 0, 1, 2, 3 or 4; provided that at least one of q and r is 1, and the sum of m, n, p, q and r is 1, 2, 3, 4, 5 or 6; and provided that when p is 0 and r is 1, the sum of m, q and n is 1, 2, 3, 4 or 5;

x1 is 1 to 10;

x2 is 1 to 10;

x3 is 1 to 10;

x4 is 1 to 10;

x5 is 1 to 10;

x6 is 1 to 10; and

x7 is 1 to 10:

x8 is 1 to 10:

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x9 is 1 to 10;

x10 is 1 to 10:

x11 is 1 to 10;

x12 is 1 to 10;

x13 is 1 to 10;

x14 is 1 to 10;

x15 is 1 to 10; and

x16 is 1 to 10:

x17 is 1 to 10; and

x18 is 1 to 10:

with the proviso that at least one of Q<sup>1</sup>, Q<sup>2</sup>, Q<sup>3</sup>, Q<sup>4</sup> and Q<sup>5</sup> is -L-M or the sugar residue, disugar residue, trisugar residue, tetrasugar residue, sugar acid, amino sugar, amino acid residue or oligopeptide residue of G is substituted with -L-M, and

wherein each of the above alkyl, alkenyl, alkynyl, alkylene, alkoxyalkoxy, alkoxyalkoxyalkoxy, alkoxyarbonylalkoxy, alkoxyarbonylalkoxy, arylakoxy, alkoxyiminoalkyl, alkyldioyl, allyloxy, aryl, arylalkyl, aryloxy, arylalkoxy, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, or heterocyclylcarbonylalkoxy groups, when present, is independently substituted.

- (Original) The compound according to claim 1, wherein m, n and r are each zero, q is 1, p is 2, and Z is -CH<sub>2</sub>-.
- 3. (Original) The compound according to claim 1, wherein m, n and r are each zero, q is 1, p is 2, and Z is  $-CH_2$ ,  $Q^1$  is  $-OR^5$ , wherein  $R^6$  is hydrogen and  $Q^5$  is fluorine.

- (Previously Presented) The compound according to claim 1, wherein R<sup>2</sup> and R<sup>3</sup> are each hydrogen.
- (Original) The compound according to claim 1, wherein Q<sup>1</sup> and Q<sup>2</sup> are each independently selected from the group consisting of -OR<sup>6</sup>, -O(CO)R<sup>6</sup>, -O(CO)OR<sup>9</sup> and -O(CO)NR<sup>6</sup>R<sup>7</sup>.
  - 6. (Original) The compound according to claim 1, wherein Q<sup>4</sup> is halo or -OR<sup>6</sup>.
- 7. (Original) The compound according to claim 1, wherein  $Q^1$  is  $-OR^6$  wherein  $R^6$  is H.
- 8. (Original) The compound according to claim 1, wherein  $Q^1, Q^2, Q^3, Q^4$  or  $Q^5$  is –L-M.
- 9. (Previously Presented) The compound according to claim 1, wherein Q<sup>1</sup>, Q<sup>2</sup>, Q<sup>3</sup>, Q<sup>4</sup> or Q<sup>5</sup> is -G or  $-(C_1-C_{10}$  alkylene)-G.
- 10. (Withdrawn) The compound according to claim 1, wherein G is selected from the group consisting of:

wherein R,  $R^a$  and  $R^b$  can be the same or different and each is independently selected from the group consisting of H, -OH, halo, -NH<sub>2</sub>, azido, alkoxyalkoxy or -W- $R^{10}$ ;

W is independently selected from the group consisting of -NH-C(O)-, -O-C(O)-, -O-C(O)-N(R<sup>31</sup>)-, -NH-C(O)-N(R<sup>31</sup>)- and -O-C(S)-N(R<sup>31</sup>)-;

R<sup>2a</sup> and R<sup>6a</sup> can be the same or different and each is independently selected from the group consisting of H, alkyl, acetyl, aryl and arylalkyl;

 $R^{3a}$ ,  $R^{4a}$ ,  $R^{5a}$ ,  $R^{5a}$ ,  $R^{3b}$  and  $R^{4b}$  can be the same or different and each is independently selected from the group consisting of H, alkyl, acetyl, arylalkyl, -C(O)alkyl and -C(O)aryl;

 $R^{10}$  is independently selected from the group consisting of  $R^{12}$ -substituted T,  $R^{22}$ -substituted-T-alkyl,  $R^{12}$ -substituted-alkenyl,  $R^{12}$ -substituted-alkyl,  $R^{12}$ -substituted-cycloalkyl and  $R^{12}$ -substituted-cycloalkylalkyl;

R31 is independently selected from the group consisting of H and alkyl;

T is independently selected from the group consisting of phenyl, furyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, benzothiazolyl, thiadiazolyl, pyrazolyl, imidazolyl and pyridyl;

R<sup>32</sup> is 1 to 3 substituents which are each independently selected from the group consisting of H, halo, alkyl, -OH, phenoxy, -CF<sub>3</sub>, -NO<sub>2</sub>, alkoxy, methylenedioxy, oxo, alkylsulfanyl, alkylsulfonyl, -N(CH<sub>3</sub>)<sub>2</sub>, -C(O)-NHalkyl, -C(O)-N(alkyl)<sub>2</sub>, -C(O)-alkyl, -C(

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alkoxy and pyrrolidinylcarbonyl; or R<sup>12</sup> is a covalent bond and R<sup>31</sup>, the nitrogen to which it is attached and R<sup>22</sup> form a pyrrolidinyl, piperidinyl, N-methyl-piperazinyl, indolinyl or morpholinyl group, or a alkoxycarbonyl-substituted pyrrolidinyl, piperidinyl, N-methylpiperazinyl, indolinyl or morpholinyl group.

(Withdrawn) The compound according to claim 10, wherein G is selected from:

HO, OH OH OH

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wherein Ac is acetyl and Ph is phenyl.

- 12. (Previously Presented) The compound according to claim 1, wherein optionally one or more carbon atoms of the  $-(C_1-C_{30}$  alkylene)- radical of  $Q^1$ ,  $Q^2$ ,  $Q^3$ ,  $Q^4$  and  $Q^5$  is independently replaced by -O -.
  - 13. (Original) The compound according to claim 1, which is

- 14. (Currently Amended) A pharmaceutical composition for the treatment of atherosclerosis, hypercholesterolemia, sitosterolemia, diabetes mellitus, obesity, etroke, lowering a concentration of cholesterol, phytosterol or 5α-stanol in plasma of a mammal, treating demyelination or treating Alzheimer's disease and/or regulating levels of amyloid β peptides in a subject comprising a therapeutically effective amount of a compound of claim 1 in a pharmaceutically acceptable carrier.
- (Original) A pharmaceutical composition comprising a cholesterol-lowering effective amount of a compound of claim 1 in a pharmaceutically acceptable carrier.

- 16. (Currently Amended) A method of treating atherosclerosis, bypercholesterolemia, sitosterolemia, diabetes mellitus, obesity, stroke, lowering a concentration of cholesterol, phytosterol or 5α-stanol in plasma of a meanmal, treating demyedination or treating Alzheimer's disease or regulating—a level of an amyloid β peptide in a subject comprising the step of administering to a subject in need of such treatment an effective amount of a compound of claim 1.
- 17. (Original) A method of lowering cholesterol level in plasma of a mammal in need of such treatment comprising administering a pharmaceutically effective amount of the compound of claim 1.
  - 18. (Currently Amended) A compound represented by the structural formula (IA):

or pharmaceutically acceptable isomers, salts, solvates or esters of the compound of Formula (IA).

wherein in Formula (IA) above:

X, Y and Z can be the same or different and each is independently selected from the group consisting of -CH<sub>2</sub>-, -CH(alkyl)- and -C(alkyl)<sub>2</sub>-;

 $Q^1 \ and \ Q^2 \ can \ be the same or different and each is independently selected from the group consisting of H, -G, -(C_1-C_{30} \ alkylene)-G, -OR^6, -OC(O)R^6, -OC(O)OR^9,$ 

-OC(O)NR<sup>6</sup>R<sup>7</sup>, and -L-M;

 $Q^3 \ is \ 1 \ to \ 5 \ substituents \ independently \ selected \ from \ the \ group \ consisting \ of \ alkyl, \ alkenyl, \ alkynyl, \ -G, \ -(C_1-C_{30} \ alkylene)-G, \ -OR^6, \ -(C_1-C_{10} \ alkylene)-OR^6, \ -(C)(O)R^6, \ -(C)(O)R^6$ 

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-(C_1-C_{10} \text{ alkylene})-C(O)R^6, -C(O)OR^6, -(C_1-C_{10} \text{ alkylene})-C(O)OR^6, -OC(O)R^6.
-(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)R<sup>6</sup>, -OC(O)OR<sup>9</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)OR<sup>9</sup>, -CH=CH-C(O)R<sup>6</sup>,
-CH=CH-C(O)OR<sup>6</sup>, -C==C-C(O)OR<sup>6</sup> -C==C-C(O)R<sup>6</sup> -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-OR<sup>6</sup>.
-O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)R<sup>6</sup>, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)OR<sup>6</sup>. -CN.
-O-(C1-C10 alkylone)-C(O)NR 6R7, -O-C(O)NR 6NR7C(O)OR6,
-O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR<sup>6</sup>NR<sup>7</sup>C(O)OR<sup>6</sup>, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)(aryl)-N<sub>3</sub>,
-OC(O)-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)OR<sup>6</sup>, -C(O)NR<sup>6</sup>R<sup>7</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR<sup>6</sup>R<sup>7</sup>,
-OC(O)NR<sup>6</sup>R<sup>7</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)NR<sup>6</sup>R<sup>7</sup>, -NO<sub>2</sub>, -NR<sup>6</sup>R<sup>7</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-NR<sup>6</sup>R<sup>7</sup>.
-O-(C2-C10 alkylene)-NR<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>C(O)R<sup>7</sup>, -NR<sup>6</sup>C(O)OR<sup>9</sup>, -NR<sup>6</sup>C(O)NR<sup>7</sup>R<sup>8</sup>, -NR<sup>6</sup>S(O)<sub>0-2</sub>R<sup>9</sup>,
-N(S(O)m2R<sup>9</sup>), -CHNOR<sup>6</sup>, -C(O)NR<sup>6</sup>R<sup>7</sup>, -C(O)NR<sup>6</sup>NR<sup>6</sup>R<sup>7</sup>, -S(O)m2NR<sup>6</sup>R<sup>7</sup>, -S(O)m2R<sup>9</sup>,
-O-C(O)-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR<sup>6</sup>R<sup>7</sup>, -OC(O)-(C<sub>1</sub>-C<sub>10</sub> alkylene)-NR<sup>6</sup>C(O)O-(alkylaryl),
-P(O)(OR10)2, -(C1-C10 alkylene)-OSi(alkyl)3 , -CF3, -OCF3, halo, alkoxyalkoxy,
alkoxyalkoxyalkoxy, alkoxycarbonylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkyldioyl,
allyloxy, aryl, arylalkyl, aryloxy, arylalkoxy, aroyl, aroyloxy, aroylaroyloxy, arylalkoxycarbonyl,
benzovlbenzovloxy, heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl, heterocyclyl,
heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylcarbonylalkoxy and -L-M;
           O4 is 1 to 5 substituents independently selected from the group consisting of alkyl,
alkenyl, alkynyl, -G, -(C1-C30 alkylene)-G, -OR6, -(C1-C10 alkylene)-OR6, -C(O)R6,
-(C1-C10 alkylene)-C(O)R6, -C(O)OR6, -(C1-C10 alkylene)-C(O)OR6, -OC(O)R6.
-(C_1-C_{10} \text{ alkylene})-OC(O)R^6, -OC(O)OR^9, -(C_1-C_{10} \text{ alkylene})-OC(O)OR^9, -CH=CH-C(O)R^6,
-CH=CH-C(O)OR6, -C==C-C(O)OR6 -C==C-C(O)R6, -O-(C:-C:o alkvlene)-OR6.
-O-(C1-C10 alkylene)-C(O)R<sup>6</sup>, -O-(C1-C10 alkylene)-C(O)OR<sup>6</sup>, -CN,
-O-(C1-C10 alkylene)-C(O)NR6R7 -O-C(O)NR6NR7C(O)OR6,
-O-(C1-C10 alkylene)-C(O)NR NR C(O)OR -O-(C1-C10 alkylene)-C(O)(aryl)-N3,
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-OC(O)-(C1-C10 alkylene)-C(O)OR6, -C(O)NR6R7, -(C1-C10 alkylene)-C(O)NR6R7,

 $-OC(O)NR^6R^7$ ,  $-(C_1-C_{10}$  alkylene) $-OC(O)NR^6R^7$ ,  $-NO_2$ ,  $-NR^6R^7$ ,  $-(C_1-C_{10}$  alkylene) $-NR^6R^7$ . -O-(C2-C10 alkylene)-NR<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>C(O)R<sup>7</sup>, -NR<sup>6</sup>C(O)OR<sup>9</sup>, -NR<sup>6</sup>C(O)NR<sup>7</sup>R<sup>8</sup>, -NR<sup>6</sup>S(O)A2R<sup>9</sup>,  $-N(S(O)_{0.2}R^9)_{Z_3}$ ,  $-CHNOR^6$ ,  $-C(O)NR^6R^7$ ,  $-C(O)NR^6NR^6R^7$ ,  $-S(O)_{0.2}NR^6R^7$ ,  $-S(O)_{0.3}R^9$ ,  $-O-C(O)-(C_1-C_{10})$  alkylene)- $C(O)NR^6R^7$ .  $-OC(O)-(C_1-C_{10})$  alkylene)- $NR^6C(O)O-(alkylaryl)$ , -P(O)(OR10)2, -(C1-C10 alkylene)-OSi(alkyl)3 . -CF3, -OCF3, halo, alkoxyalkoxy, alkoxyalkoxyalkoxy, alkoxycarbonylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkyldioyl, allyloxy, aryl, arylalkyl, aryloxy, arylalkoxy, aroyl, aroyloxy, aroylaroyloxy, arylalkoxycarbonyl, benzoylbenzoyloxy, heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylcarbonylalkoxy and -L-M; O5 is 1 to 5 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, -G, -(C1-C30 alkylene)-G, -OR6, -(C1-C10 alkylene)-OR6, -C(O)R6,  $-(C_1-C_{10} \text{ alkylene})-C(O)R^6$ ,  $-C(O)OR^6$ ,  $-(C_1-C_{10} \text{ alkylene})-C(O)OR^6$ ,  $-OC(O)R^6$ . -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)R<sup>6</sup>, -OC(O)OR<sup>9</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)OR<sup>9</sup>, -CH=CH-C(O)R<sup>6</sup>, -CH=CH\_C(O)OR<sup>6</sup>, -C==C-C(O)OR<sup>6</sup>, -C==C C(O)R<sup>6</sup>, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-OR<sup>6</sup>, -O-(C1-C10 alkylene)-C(O)R6 -O-(C1-C10 alkylene)-C(O)OR6, -CN, -O-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR<sup>6</sup>R<sup>7</sup>, -O-C(O)NR<sup>6</sup>NR<sup>7</sup>C(O)OR<sup>6</sup>, -O-(C<sub>01</sub>-C<sub>10</sub> alkylene)-CONR NR COOR - -O-(C1-C10 alkylene)-C(O)(aryl)-N3, -OC(O)-(C1-C10 alkylene)- $C(O)OR^6$ ,  $-C(O)NR^6R^7$ ,  $-(C_{01}-C_{10}$  alkylene)- $C(O)NR^6R^7$ ,  $-OC(O)NR^6R^7$ . -(C<sub>1</sub>-C<sub>10</sub> alkylene)-OC(O)NR<sup>6</sup>R<sup>7</sup>, -NO<sub>2</sub>, -NR<sup>6</sup>R<sup>7</sup>, -(C<sub>1</sub>-C<sub>10</sub> alkylene)-NR<sup>6</sup>R<sup>7</sup>,  $-O-(C_2-C_{10})$  alkylene)-NR<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>C(O)R<sup>7</sup>, -NR<sup>6</sup>C(O)OR<sup>9</sup>. -NR C(O)NR R , -NR S(O) -2R , -N(S(O) -2R h. -CHNOR , -C(O)NR R. -C(O)NR<sup>6</sup>NR<sup>6</sup>R<sup>7</sup>, -S(O)<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>, -S(O)<sub>2</sub>R<sup>9</sup>, -O-C(O)-(C<sub>1</sub>-C<sub>10</sub> alkylene)-C(O)NR<sup>6</sup>R<sup>7</sup>, -OC(O)-(C1-C10 alkylene)-NR6C(O)O-(alkylaryl), -P(O)(OR10)2, -(C1-C10 alkylene)-OSi(alkyl)3 . -CF3, -OCF3, halo, alkoxyalkoxy, alkoxyalkoxyalkoxy, alkoxycarbonylalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkyldioyl, allyloxy, aryl, arylalkyl, aryloxy, arylalkoxy, aroyl, aroyloxy, aroylaroyloxy, arylalkoxycarbonyl, benzoylbenzoyloxy,

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heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, heterocyclylcarbonyl alkoxy and -L-M;

wherein optionally one or more carbon atoms of the  $-(C_1-C_{10}$  alkylene)- radical of  $Q^1$ ,  $Q^2$ ,  $Q^3$  and  $Q^5$  is independently replaced by -O-, -C(O)-, -CH=CH-,  $-C \Longrightarrow C$ -, -N(alkylaryl)- or -NH-:

G is selected from the group consisting of a sugar residue, disugar residue, trisugar residue, tetrasugar residue, sugar acid, amino sugar, amino acid residue, oligopeptide residue comprising 2 to 9 amino acids, trialkylammoniumalkyl <u>saltradiesi</u> and -S(O)<sub>2</sub>-OH, wherein optionally the sugar residue, disugar residue, trisugar residue, tetrasugar residue, sugar acid, amino sugar, amino acid residue or oligopeptide residue of G is substituted with -L-M;

L is selected from the group consisting of

$$\begin{cases} -0 - C(O) \cdot \left( -\frac{1}{2} \right) \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - (O)C - \frac{1}{2} \right\} \\ = \begin{cases} -(CH_2)_{\overline{MB}} - C(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - (O)C - \frac{1}{2} \right\} \\ = -0 - SIMe_2 - (CH_2)_{\overline{MB}} - (CCO) - \frac{1}{2} \cdot \left\{ -0 - SIMe_2 - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \right\} \\ = -(CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - (CH_2)_{\overline{MB}} - CC(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - (CH_2)_{\overline{MB}} - NHC(O) - \frac{1}{2} \cdot \left\{ -0 - C(O) - (CH_2)_{\overline{MB}} - NHC(O) - (CH_$$

wherein Me is methyl:

M is selected from the group of moieties consisting of

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and pharmaceutically acceptable salts of moieties (M1) to (M33);

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 $R^2$  and  $R^3$  can be the same or different and each is independently selected from the group consisting of hydrogen, alkyl and aryl;

 $R^6$ ,  $R^7$  and  $R^8$  can be the same or different and each is independently selected from the group consisting of hydrogen, alkyl, aryl and arylalkyl; and

each R9 is independently alkyl, aryl or arylalkyl.

each R10 is independently H or alkyl;

a is 0 or 1;

r is 0 or 1;

m, n and p are independently selected from 0, 1, 2, 3 or 4; provided that at least one of q and r is 1, and the sum of m, n, p, q and r is 1, 2, 3, 4, 5 or 6; and provided that when p is 0 and r is 1, the sum of m, q and n is 1, 2, 3, 4 or 5;

x8 is 1 to 10;

x9 is 1 to 10;

x10 is 1 to 10:

x11 is 1 to 10;

x12 is 1 to 10;

x13 is 1 to 10:

x14 is 1 to 10:

x15 is 1 to 10; and x16 is 1 to 10:

x17 is 1 to 10; and

x18 is 1 to 10:

with the proviso that at least one of  $Q^1$ ,  $Q^3$ ,  $Q^3$ ,  $Q^4$  and  $Q^5$  is -L-M or the sugar residue, disugar residue, trisugar residue, tetrasugar residue, sugar acid, amino sugar, amino acid residue or oligopeptide residue of G is substituted with -L-M, and

wherein each of the above alkyl, alkenyl, alkynyl, alkylene, alkoxyalkoxy, alkoxyalkoxyalkoxy, alkoxyarylalkoxy, alkoxyiminoalkyl, alkyldioyl, allyloxy, aryl, arylalkyl,

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aryloxy, arylalkoxy, aroyl, aroyloxy, aroylaroyloxy, arylalkoxycarbonyl, benzoylbenzoyloxy, heteroaryl, heteroarylalkyl, heteroarylalkoxy, dioxolanyl, heterocyclyl, heterocyclylalkyl, heterocyclylcarbonyl, or heterocyclylcarbonylalkoxy groups, when present, is independently substituted or unsubstituted.

- 19. (Original) The compound according to claim 18, wherein m, n and r are each zero, q is 1, p is 2, and Z is  $-CH_2$ .
- (Original) The compound according to claim 18, wherein m, n and r are each zero, q is 1, p is 2, and Z is -CH<sub>2</sub>-, Q<sup>1</sup> is -OR<sup>6</sup>, wherein R<sup>6</sup> is hydrogen and Q<sup>5</sup> is fluorine.
- 21. (Previously Presented) The compound according to claim 18, wherein  $R^2$  and  $R^3$  are each hydrogen.
- (Original) The compound according to claim 18, wherein Q<sup>1</sup> and Q<sup>2</sup> are each independently selected from the group consisting of -OR<sup>6</sup>, -O(CO)R<sup>6</sup>, -O(CO)OR<sup>9</sup> and -O(CO)NR<sup>6</sup>R<sup>7</sup>.
  - 23. (Original) The compound according to claim 18, wherein Q<sup>4</sup> is halo or -OR<sup>6</sup>.
- 24. (Original) The compound according to claim 18, wherein  $Q^1$  is  $-QR^6$  wherein  $R^6$  is H.
- 25. (Original) The compound according to claim 18, wherein  $Q^1,\,Q^2,\,Q^3,\,Q^4$  or  $Q^5$  is -L-M.

- 26. (Previously Presented) The compound according to claim 18, wherein  $Q^1$ ,  $Q^2$ ,  $Q^3$ ,  $Q^4$  or  $Q^3$  is -(C<sub>1</sub>-C<sub>39</sub> alkylene)-G.
- (Withdrawn) The compound according to claim 18, wherein G is selected from the group consisting of:

wherein R,  $R^a$  and  $R^b$  can be the same or different and each is independently selected from the group consisting of H, -OH, halo, -NH., azido, alkoxyalkoxy or -W- $R^{30}$ ;

W is independently selected from the group consisting of -NH-C(O)-, -O-C(O)-, -O-C(O)-N(R<sup>31</sup>)-, -NH-C(O)-N(R<sup>31</sup>)- and -O-C(S)-N(R<sup>31</sup>)-;

R<sup>2a</sup> and R<sup>6a</sup> can be the same or different and each is independently selected from the group consisting of H. alkyl, acetyl, aryl and arylalkyl;

R<sup>3a</sup>, R<sup>4a</sup>, R<sup>5a</sup>, R<sup>7a</sup>, R<sup>3b</sup> and R<sup>4b</sup> can be the same or different and each is independently selected from the group consisting of H, alkyl, acetyl, arylalkyl, -C(O)alkyl and -C(O)aryl;

 $R^{30}$  is independently selected from the group consisting of  $R^{32}$ -substituted T,  $R^{32}$ -substituted-T, alkyl,  $R^{32}$ -substituted-alkenyl,  $R^{32}$ -substituted-alkyl,  $R^{32}$ -substituted-cycloalkyl and  $R^{32}$ -substituted-cycloalkylalkyl;

R31 is independently selected from the group consisting of H and alkyl;

T is independently selected from the group consisting of phenyl, furyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, benzothiazolyl, thiadiazolyl, pyrazolyl, imidazolyl and pyridyl;

R<sup>12</sup> is 1 to 3 substituents which are each independently selected from the group consisting of H, halo, alkyl, -OH, phenoxy, -CF<sub>3</sub>, -NO<sub>2</sub>, alkoxy, methylenedioxy, oxo, alkylsulfanyl, alkylsulfinyl, alkylsulfonyl, -N(CH<sub>3</sub>)<sub>2</sub>, -C(O)-NHalkyl, -C(O)-N(alkyl)<sub>2</sub>, -C(O)-alkoxy and pyrrolidinylcarbonyl; or R<sup>12</sup> is a covalent bond and R<sup>21</sup>, the nitrogen to which it is attached and R<sup>22</sup> form a pyrrolidinyl, piperidinyl, N-methyl-piperazinyl, indolinyl or morpholinyl group, or a alkoxycarbonyl-substituted pyrrolidinyl, piperidinyl, N-methylpiperazinyl, indolinyl or morpholinyl group.

28. (Withdrawn) The compound according to claim 27, wherein G is selected from:

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wherein Ac is acetyl and Ph is phenyl.

- (Original) The compound according to claim 18, wherein optionally one or more carbon atoms of the -(C<sub>1</sub>-C<sub>30</sub> alkylene)- radical of Q<sup>1</sup>, Q<sup>2</sup>, Q<sup>3</sup>, Q<sup>4</sup> and Q<sup>5</sup> is independently replaced by -O -.
- 30. (Currently Amended) A pharmaceutical composition for the treatment of atherosclerosis, hypercholesterolemia, sitosterolemia, diabetes mellitus, obesity, stroke, lowering a concentration of cholesterol, phytosterol or 5α-stanol in plasma of a mammal, treating demyeliaation or treating Alzheimer's discuss and/or regulating levels of amyloid β peptides in a subject comprising a therapeutically effective amount of a compound of claim 18 in a pharmaceutically acceptable carrier.
- (Original) A pharmaceutical composition comprising a cholesterol-lowering effective amount of a compound of claim 18 in a pharmaceutically acceptable carrier.
- 32. (Currently Amended) A method of treating atherosclerosis, hypercholesterolemia, sitosterolemia, diebetee-mellitac, ebesity, swelcy lowering a concentration of cholesterol, phytosterol or 5α-stanol in plasma of a mammal, treating demyelination or treating Alzheimer's disease or regulating a level of an amyloid β peptide in a subject comprising the step of administering to a subject in need of such treatment an effective amount of a compound of claim 18.

33. (Original) A method of lowering cholesterol level in plasma of a mammal in need of such treatment comprising administering a pharmaceutically effective amount of the compound of claim 18.